DOCUMENT RESUME

ED 387 975 EC 304 329

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TITLE Psychological Intensities in Young Gifted Children.
INSTITUTION Denver Univ., CO. Ricks Center for Gifted Children.
PUB DATE Sep 95
NOTE 15p.; Paper presented at the Esther Katz Rosen Symposium on the Psychological Development of Gifted Children (Lawrence, KS, September 8-9, 1995).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Case Studies; Child Development; *Gifted; Personality Theories; *Personality Traits; Preschool Education; *Psychological Characteristics; Student Characteristics; Teaching Methods; Young Children
IDENTIFIERS *Dabrowski (Kazimierz); *Overexcitability

ABSTRACT

This on-going qualitative multiple case study is examining K. Dabrowski's ideas concerning psychic overexcitability in gifted children, by describing the overexcitabilities exhibited by five young gifted children. The five children, ages 3 and 4, attend a private school for gifted children and were purposely selected to provide examples of the five different types of overexcitability postulated by Dabrowski. These are: (1) psychomotor overexcitability, (2) sensual overexcitability, (3) intellectual overexcitability, (4) imaginational overexcitability, and (5) emotional overexcitability. Data sources included individualized education plans of each child, intellectual evaluations, developmental questionnaires completed by parents, interviews with teachers, and observations of students in classrooms. Analysis indicated that all the children exhibited behaviors characteristic of intellectual, imaginational, and emotional overexcitability and two of the children also exhibited psychomotor and sensual excitability. Examples are given of child behaviors which demonstrate each of these sensitivities and of teaching strategies for dealing with them. (Contains 23 references.) (DB)

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UNIVERSITY of DENVER

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ED 387 975

Psychological Intensities in Young Gifted Children

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Paper Presented at the Esther Katz Rosen Symposium
on the Psychological Development of Gifted Children
The University of Kansas
Lawrence, Kansas

Sept. 8 - 9, 1995

EC304329

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Emotional sensitivity and emotional intensity are well documented in gifted children (Clark, 1988; Cohen, 1989; Piechowski, 1992; Roedell, 1984; Whitmore, 1980). Sensitivity to environmental and social problems may lead these children to feel despair and cynicism at very young ages. These children's intense sensitivity can intensify their reactions to the ordinary problems of growing up (Silverman, 1983). Sometimes they perceive their own intense inner experiences as evidence that something is wrong with them; other children may ridicule the young gifted child for their strong reactions to apparently trivial incidents (Roedell, 1984; Silverman, 1983).

Dabrowski (1964, 1972) studied the mental health of gifted, creative, and eminent individuals. He proposed that sensitivity and emotional intensity was a part of their psychosocial makeup (Piechowski, 1992). Instead of viewing these sensitivities as neurotic imbalances, he viewed them as positive potentials for further growth, which he termed developmental potential (Piechowski, 1992).

This concept of developmental potential is a central idea in Dabrowski's theory of human development, called the theory of positive disintegration (Piechowski, 1979). Developmental potential is defined as the attributes which determine what level of development a person may reach under optimal conditions (Piechowski, 1979). The defining characteristics of developmental potential include talents, special abilities, intelligence and five forms of psychic overexcitability: psychomotor, sensual, intellectual, imaginational, and emotional. Piechowski defines the concept,

> Dabrowski called them forms of psychic overexcitability to underline the enhancement and intensification of mental activity much beyond the ordinary. Overexcitabilities contribute to the individual's psychological development, and thus their strength can be taken as a measure of developmental potential (Piechowski, 1992, p. 287).

Those who work with gifted children often find instant recognition of these forms of overexcitability, for they provide a theoretical model that makes sense of the feeling and behaving of their students (Piechowski, 1992). Studies have been done that describe how overexcitabilities are exhibited in adolescents and adults (Lysy & Piechowski, 1993; Piechowski & Colangelo, 1984; Piechowski, Silverman, & Falk, 1985) but little work has been done that describes how these overexcitabilities are exhibited in young gifted children. A search of the ERIC database elicits one study (Kitano, 1990) and a search of Dissertation Abstract reveals one more (Howard, 1994). This study, presently in progress, proposes to address this lack by describing how Dabrowski's overexcitabilities are exhibited in five young gifted children.

The Research Study

Theoretical Framework

A qualitative, multiple case study design was selected for this study. A qualitative case study is an inquiry that investigates a particular circumstance within its real-life context and benefits from the prior development of theoretical propositions to guide collection and data analysis (Creswell, 1994; Yin, 1994). The theoretical framework guiding data collection and analysis in this study are the five overexcitabilites identified in Dabrowski's (1964; 1972) theory of positive disintegration. The five overexcitabilities identified by Dabrowski are:

> Psychomotor Overexcitability
>
> The manifestations of psychomotor excitability are essentially of two kinds: surplus of energy and nervousness-a psychomotor expression of emotional tension. In nervousness, the emotional tension is translated into psychomotor activity such as tics, nail biting, or impulsive and violent behavior. .....The surplus of energy can be observed in animated gestures taking on self-imposed tasks.....
>
> Sensual Overexcitability
>
> Sensual overexcitability is expressed in heightened experiencing of sensory pleasures and in seeking sensual outlets for inner tension.....other manifestations of sensual overexcitability include ...marked interest in clothes and appearance, fondness for jewelry and ornaments.....
>
> Intellectual Overexcitability
>
> The manifestations of intellectual overexcitability are associated with an intensified and accelerated activity of the mind. Its strongest expressions have more to do with striving for understanding, probing the unknown and love of truth than with learning per se or academic achievement....
>
> Imaginational Overexcitability
>
> The presence of imaginational overexcitability can be inferred from frequent distraction, wandering attention, and daydreaming. These occur as a consequence of free play of the imagination. Here, too, belong illusions, animistic thinking, expressive image and metaphor, invention and fantasy....

Emotional Overexcitability

> Among the five forms of psychic overexcitability, the manifestations of emotional overexcitability are the most numerous. They include certain characteristic and easily recognizable somatic expressions, extremes of feeling, inhibition, strong affective memory, concern with death, anxieties, fears, feelings of guilt, depressive and suicidal moods...(Piechowski, 1979, pp. 32-38).

Data Source

Data are being collected on five young children, ages three and four, who attend a private school for gifted children. The children were selected for participation in the gifted program through a multi-faceted identification process that included a developmental history, parental questionnaire, and activity-based assessment.

This identification process involves referrals, information gathering, assessment, and selection; and then moves into curriculum development. It incorporates multiple data sources including information supplied by parents and teachers, developmental information, and observations of children engaged in activities. Validity and reliability of the process are assured through the triangulation of the multiple data sources.

The five children were purposively selected for participation in the study to provide examples of the different overexcitabilities. Two of the children are female: Katrina and Heather. Three of the children are male: Gerald, Steven, and Peter.

Data sources include Individual Educational Plans (I.E.P.) written for each child, intellectual evaluations completed by psychologists (which included I.Q. and achievement testing), developmental questionnaires completed by parents, interviews with teachers, and observations of students in classrooms.

Data Analysis and Reporting the Findings

Data collection and analysis are simultaneous processes in qualitative research (Merriam, 1988; Marshall and Rossman, 1989). As data is collected, it is analyzed using Dabrowski's overexcitabilities for initial themes. Systematic data reduction of the themes results in pattern generation. Consistent with a qualitative design, the patterns are developed into narrative description (Creswell, 1994) in an effort to provide for readers an understanding of how overexcitabilities are exhibited in young gifted children. To ensure the validity and reliability of results, data is being triangulated through the multiple sources (Creswell, 1994).

Preliminary Results

The children in this study demonstrate behaviors consistent with Dabrowski's theory. The different overexcitabilities are exhibited by the children through individual choices made in activities, their reactions to stress, and in their daily actions at home and in the classroom (See Data Collection Matrix, p. 5). The children all exhibit behaviors characteristic of three forms of overexcitability: intellectual, imaginational, and emotional. Behaviors characteristic of the other two overexcitabilities, psychomotor and sensual, are exhibited by Katrina and Heather.

Intellectual Overexcitability

Intellectual overexcitability is manifested by the asking of probing questions, problem solving, curiosity, concentration, and theoretical thinking (Piechowski, 1992). In this study, all of the children exhibit some aspects of intellectual overexcitability. Gerald evidences the most behaviors consistent with intellectual overexcitability.

All of the children display curiosity. For example, Katrina's parents report,

> She is a very curious child. She often asks the question why, then will usually repeat your answer out loud, as if processing it, then she seems to retain it and will apply the newly learned concept freely.

Three of the children are reported and observed to have excellent problem solving skills: Gerald, Katrina, and Steven. Teachers' report that one of Steven's strengths is his "problem solving and critical thinking skills." Katrina's psychological evaluations note, "Katrina's verbal problem solving abilities are quite remarkable, easily several years beyond her chronological age."

All of the children are reported to ask the question, "why"; but only two children's, Gerald and Peter, questioning seems to encompass the striving for understanding to which Piechowski (1979) refers in describing the overexcitability. For example, Peter's parents relate,

> Peter has an interest in almost everything around him. He is like a sponge, just waiting to soak in as much knowledge as possible. He is constantly questioning, probing, wondering...

Gerald evidences the concentration to tasks of those possessing intellectual overexcitability. His parents state,

Data Collection Matrix

Overexcitability	Gerald	Katrina	Heather	Steven	Peter
Psychomotor					
Rapid Speech		♦			
Surplus of Energy		♦			
Compulsive Actions		♦			
Marked Enthusiasm		♦			
Sensual					
Sensory Pleasures			♦		
Sensual Expression of Emotional Tension			♦		
Imaginational					
Imaginative Thinking	♦				
Fantasy Play	♦	♦	♦	♦	♦
Dramatic Perception		♦	♦	♦	
Animistic Thinking				♦	
Daydreaming				♦	
Emotional					
Concern for Others	♦	♦	♦	♦	♦
Timidity					♦
Fear and Anxiety					♦
Intensity of Feeling		♦			♦
Difficulty in Adjusting to New Environments					♦
Intellectual					
Asking Probing Questions	♦		♦		
Problem Sovling	♦	♦		♦	♦
Curiosity	♦	♦		♦	♦
Concentration	♦		♦		
Theoretical Thinking	♦				

> Gerald likes to tackle tasks until he has mastered or completed them. When Gerald receives a new puzzle, he does it over and over again until he has it mastered. When we check out books from the library he wants to read them over and over again until he has them memorized and can 'read' them.

He also exhibits some early theoretical or conceptual knowledge and a joy in learning for its own sake. His teachers state, "His role playing shows his knowledge of concepts and information." His parents note,

> Since he has learned to add and subtract, Gerald is always trying to apply simple math to situations in everyday life. He will count the people in a family, then add and subtract for visitors or someone in the family leaving. He counts what his age will be at a certain point and then subtracts to find out what his age would be.....

Imaginational Overexcitability

Imaginational overexcitability is characterized by free play of the imagination such as animistic and magical thinking, inventions of fantasy dramatic perception, and daydreaming (Piechowski, 1992). All of the children in this study enjoy and engage in fantasy play. As play is one of the chief ways children learn during the early childhood period, this participation in fantasy play might be considered a part of these children's normal development (Bredekamp, 1987; Parke and Ness, 1988).

Steven displays the " wandering attention, free play of the imagination, and animistic thinking" referred to by Piechowski (1979, p. 32-38). Every time the researchers observed free play in the classroom, Steven was the only one of the five subjects always engaged in imaginative play. One day he reported, "We are playing that we are bears. We are building a shelter for us". On another day he was pretending to be a bee. On a third morning, he stated, "We are dinosaurs's. I am a Tyrannosaurs Rex, grrrr." His reasons for doing things were also very inventive. One morning, as he was cleaning the paint off a table, he told his teacher, "I have cleaned the table with hot water. The hot water burned the paint off the table."

Steven's wandering attention was observed both in the classroom and by his evaluator. When he was observed in the classroom during circle time (a time when the students meet together as a classroom group), he was constantly having to be asked to "come back to the circle" and to "pay attention to his friends." His educational evaluation notes, "Steven had difficulty remaining seated in his chair and needed to be constantly redirected to the task at hand." Using his imagination seems to be his preferred way to experience information. His teachers' report,

> Sociodramatic play is a favorite way for Steven to relay information he has learned by creating scenarios that incorporate this new information.

Emotional Overexcitability

All the children in this study evidenced some of the behaviors characteristic of emotional overexcitability. Emotional overexcitability is indicated by somatic expressions, intensity of feeling, timidity, shyness, concern for others, fear and anxiety, and difficulty of adjustment to new environments.

Teachers, parents, and observations note that all the children are sensitive to the needs of others. Steven, for example, is described as "..a sensitive boy who is aware of peers and their needs and discomforts. He regularly makes the entire class aware when someone is in need of assistance emotionally or physically." Katrina is portrayed as, "keenly aware and sensitive to peer's needs."

Gerald is characterized by his examiner as "introverted"; and in the classroom he was observed to be quiet and to enter into activities slowly. Peter is also described by his teachers as,

> Hesitant to do some activities until he has had time to watch and evaluate the process. He then engages in the activity when he feels comfortable.

Peter displays the most behaviors that indicate emotional overexcitability. In addition to his timidity, he demonstrates fear and anxiety in the classroom on occasions. His teachers recount, "He is at times uncomfortable with the noise and activity level in the classroom" and he displays extreme emotions during these times, many times crying. His teachers also note, "He does not like transition between new situations or classroom."

Psychomotor Overexcitability

Psychomotor overexcitability is evidenced by a surplus of energy including rapid speech, impulsive actions, pressure for motion, and marked enthusiasm. (Piechowski, 1992). Katrina is the one child in this study that behaviors indicate these characteristics. She displays the marked enthusiasm characteristic of psychomotor excitability. Her psychological examinations note,

> Katrina displayed no hesitancy about entering a new unfamiliar situation. She easily separated from her mother and approached the testing with curiosity and enthusiasm.

Her teachers also report her enthusiasm. They state in her I.E.P., "Katrina sometimes overwhelms her classmates with her enthusiasm."

When Katrina was observed in the classroom, she displayed a tendency for constant motion. During the period of a half an hour, she was first observed poking her friend with a marker. After she was told to stop doing this, she walked over to look at pictures, she then went to sit down at the computer. After a minute or two, she got up and went to the bathroom. When she came back, she grabbed her friend by the neck and started to dance with her, yelling, "chug, chug, choo, choo." Then she went to the table to paint for a couple of minutes. She got her hands dirty, and she ran around the room saying, "green messy--green messy, I say green messy." She then went back to the table. She painted for another couple of minutes, and then she changed tables to draw. She would choose one marker from the marker box, run over to the table and draw with it, and then run back to the marker box to put it away and get another marker.

Katrina also displays a tendency to speak rapidly and to hurry through activities. Her examiner reports,

> Eagerness tends to get in the way during some of the paper and pencil tasks. In her desire to accomplish the task, she responded so quickly she did not plan ahead or count accurately.....Counting gave Katrina some trouble, this was primarily because she counted items out loud faster than she could track them with her eyes.

Her teachers communicate her need for motion in her I.E.P.,

> Katrina expresses herself through movement and liveliness during class activities.....If an activity is stationary her attending time is brief. If the activity involves movement she is engaged for a much longer period.....She learns best by physically experiencing information.

Sensual Overexcitability

Sensual overexcitability is manifested in the extreme appreciation of a variety of visual, auditory, tactile, olfactory, or oral experience (Ogburn-Colangelo, 1979). Heather evidences behaviors characteristic of sensual overexcitability, which include enjoying sensory pleasures and using sensual expressions of emotional tension (Piechowski, 1992). One morning, when she was observed in the classroom, she spent free time sitting in the costume trunk stroking the many different fabrics and putting on the costumes and jewelry. Another day she spent a lot of time smelling each one of a set of scented magic markers before she decided which one to use. At lunch she was very concerned with the smell, taste, and texture of her

food. One day she related that she could not eat the cheese in her lunch because she, " did not like how it smelled."

Many of Heather's comments refer to the sensual aspects of an object or place. Her parents report that she notices everything going on around her and comments on it. They relate that she says things like, "The sky is really blue today" or "Those flowers have a wonderful smell." In describing her nanny's dog to the researcher, she stated, "It is very fluffy, with white hair, and tiny."

During circle time, she often licks her fingers while listening. When she becomes upset or is listening very carefully, she sucks her thumb.

Discussion

According to Dabrowski's theory, there are five stages of emotional development: primary integration, unilevel disintegration, spontaneous multilevel disintegration, organized multilevel disintegration, and secondary integration. At the highest level of development, secondary integration, an individual will develop an authentic hierarchy of values, empathy, and responsibility (Piechowski, 1979). This level of development has been shown to correspond to Maslow's (1970) highest level of moral development, self-actualization (Piechowski, 1978). Potential for advanced development is strongest when all five forms of overexcitability are evident. But the presence of imaginational, intellectual, and emotional overexcitabilities are essential for multi-level development (Ogburn-Colangelo, 1979). The five of the children in this study all display some behaviors indicative of these three overexcitabilities. According to the theory of positive disintegration, therefore, these children all evidence the capacity for advanced development.

Of the three overexcitabilites that must be evident for multi-level development, emotional overexcitability is most often associated with developmental potential, especially its relationship aspect. Its presence is necessary if the highest level of development is to occur (Ogburn-Colangelo, 1979). The relationship aspect of emotional overexcitability generates the intrapsychic dynamisms that allow the development of the autonomous hierarchy of values, empathy, and responsibility (Piechowski, 1979). All the children in this study display this relational aspect of emotional overexcitability. They demonstrate a strong concern for others and their feelings, compassion, and self-reflection through their behaviors and comments. Katrina's parents recount,

> She is hurt very easily when teased or called a name. She is very attuned to other people if they are happy, sad, or angry. She will often ask, "Why is that child crying?" She becomes very upset if she is talked to harshly.

The presence of this relational aspect of emotional overexcitability also

indicates in these children a capacity for advanced development.

Though all the children exhibit some aspects of three overexcitabilities, each display characteristics consistent with one overexcitability more than the others. Gerald exhibits the most behaviors consistent with intellectual overexcitability, Katrina with psychomotor, Heather with sensual, Steven with imaginational, and Peter with emotional. These overexcitabilites require some modifications in classroom procedures and curriculum.

The school these children attend uses an integrated-thematic curriculum that allows children to engage in many different types of activities. A typical day might include an art project in which children might feel the textures of materials, a physical activity in which the children have the opportunity to learn kinesthetically, and an opportunity to engage in imaginative play. In this type of curriculum, children have the opportunity to participate in activities that address their dominant overexcitabilities.

The classroom teachers who work with these students have developed some strategies for dealing with these children's different sensitivities. In Katrina's case, her enthusiasm sometimes overwhelms her classmates. Her teachers have strived to develop in her an understanding of how her actions impact others. When her enthusiasm and excessive movement overwhelm others, they ask her how she thinks it makes her classmates feel. This appeal to her emotional sensitivity has helped her control her impulsive actions. At the end of the 1995 school year, her I.E.P. states,

> Katrina continues to be an active participant in classroom activities....Although her enthusiasm at times still overwhelms her classmates, she is learning that her actions reflect her peers' response to her and she is increasing in her responsiveness to their comfort level.

Peter's sensitivity to transitions and excessive noise or movement has resulted in the teachers developing strategies for him to deal with his fears and anxieties. When he feels like the classroom activity is becoming too intense for him, Peter comes up and squeezes one of his teacher's fingers or he puts his hands over his ears. He then goes to a quiet corner in which he can stay until he feels more comfortable. When it is time for a transition in activities, teachers prepare Peter before the transition takes place. This allows him to prepare for the change before it occurs. The teachers also allow Peter to watch activities in class before they encourage him to become directly involved.

His teachers note on his final I.E.P. of the 1995 year that they had seen a lot of growth in the social-emotional area for Peter,

> His comfort level in the classroom has increased tremendously. He is taking more risks in his work and is seldom hesitant

> to try anything in the classroom. His transitions are made easily and he is not hesitant to let us know if he is uncomfortable with a situation.

Understanding a child's overexcitabilities can also be useful when assessing their knowledge and understanding of concepts. Katrina, for example, scored lower than she might have on some aspects of her psychological evaluations because of her tendency to rush through activities. Katrina's teachers have discovered that she learns and displays her learning through movement and allow her that opportunity throughout the day.

Preliminary data analysis seems to support the use of Dabrowski's theory as a means of identifying and understanding some aspects of the behavior of young gifted children. Data will continue to be collected and analyzed during the 1995-96 school year.

Conclusions and Implications

Roeper (1984) relates that concern for the psychological development of gifted children needs to become a part of education for the gifted. She writes,

> A child is a total entity; a combination of many characteristics. Emotions cannot be treated separately from intellectual awareness or physical development: all intertwine and influence each other (p. 21).

In order to deal effectively with gifted children, teachers need to understand and to deal with both the psychological and intellectual facets of giftedness. The concept of developmental potential allows teachers a way of assessing their students' psychological and educational needs. Teachers of gifted children should be made aware of the five overexcitabilites and that their presence is a part of the child's giftedness, and not necessarily indicative of some type of psychological problem.

Curriculum that provides learning through many different types of activities: sensory, kinesthetic, imaginational, and intellectual can allow gifted children to use their overexcitabilites to help them learn. Helping students develop the necessary coping skills to deal with their overexcitabilities can also enhance their learning, as developing effective coping skills allows students to concentrate on learning and less on their psychological concerns.

Additional studies need to be done that describe how overexcitabilites are exhibited in children of many different ages and how teachers can help children understand and manage them. These types of studies can provide teachers of gifted children with strategies for dealing more effectively with their students.

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